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26th March 1959

COORDINATING COMMITTEE

RECORD OF DISCUSSION

ON

PROPOSED BELGIAN EXPORT OF CABLES TO THE U.S.S.R.

18th March, 1959.

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Present: Belgium(Luxembourg), Canada, Denmark, France, Germany, Italy, Japan, Netherlands, United Kingdom, United States.

References: COCOM Documents Nos. 3436 and Addendum, 3444, 3450, 3451, 3452 and 3464.

1. The CHAIRMAN recalled that, as stated in paragraph 19 of COCOM Document No. 3452, it was agreed that in the course of the present meeting the Committee would hear replies of Member Governments as to the Belgian case submitted in COCOM Document No. 3436. He first asked the Belgian Delegate if he wished to speak before the other Members of the Committee made known their Governments' views.

2. The BELGIAN Delegate stated that, after hearing the information supplied by the French Delegation, his authorities had undertaken a comparative study of the characteristics of the railway signalling cables in use in Belgium and of those of the cables requested by the U.S.S.R. The findings might be summed up as follows:

Loaded or unloaded, low-frequency circuits	National Belgian railways	Cables requested by the U.S.S.R.
Number of quads	16 to 30	8
Conductor diameter in mm	0.8	1.2
Capacitance (nanofarad/km)	38	26
Load (millihenry)	129	140
Spacing (km)	1.3	1.7
Unloaded circuits		
Number of quads	3 to 5	6
Conductor diameter in mm	1.3	1.2
Capacitance (nanofarad/km)	26	26
Frequency (kilohertz)	120	150

3. The Delegate made the following comments on the above data:

Loaded circuits.

Number of quads. The difference in the number of quads is fully justified by the density of the traffic and the complexity of the Belgian railway system, which is probably the densest in the world, and which has the smallest distances between stations and railway junctions.

Conductor diameter and capacitance. The smaller the diameter and the higher the capacitance, the greater the kilometric loss. If it is necessary to service long distances, as is the case for the Russians, the kilometric capacitance is lower (26 instead of 38)

and the diameter of the wire higher (1.2 instead of 0.8).

Load and spacing. The Russian load (140 instead of 129) and the Russian spacing (1.7 instead of 1.3) are very similar from the loss point of view to the Belgian conditions. The cut-off frequency is lower for the Russians than for the Belgians, with a corresponding reduction in fidelity.

Unloaded circuits.

Number of quads. The number of Russian quads (6 instead of from 3 to 5 for the Belgian system) would provide the Russians with a greater number of long-distance communications, which seems reasonable in view of the structure of their railway system.

Capacity and diameter of the conductors. In Belgium, there is a tendency to standardize the conductor diameter at 1.3 mm, this diameter and the frequency depending upon the distance between amplifiers.

Frequency. The frequency used in Russia allows of a larger number of communications (15 instead of 12).

4. In conclusion, the Delegate stated that the characteristics he had just described clearly showed that the cables were similar to those used by the Belgian railways and almost identical with those used by the S.N.C.F. They could not be confused with communications cable properly so-called, particularly because of their protective covering against the effects of induction. The Belgian Government would find it inconceivable that objections should be raised to the export of such cable when the export of their ancillary equipment was authorised.

5. The GERMAN Delegate stated that, further to his Delegation's Memorandum (COCOM Document No. 3450) he wished to submit the following observations dealing with the offers made to various participating countries. In view of the importance attributed by some delegations to the communication-equipment items on the International List, the competent German authorities had given special attention to the study of the U.S.S.R.'s request for 1200 km of multi-purpose railway cable. For that reason, the German application had not been submitted to the Committee earlier, although the proposed transaction had already been under consideration for a considerable period of time.

6. In the opinion of the competent German authorities, the cables in question did fall under Item 1526. They contained 28 pairs of conductors and their composition did not differ at all from the usual high-frequency cables in a carrier-frequency communication system. The technical specifications asked for in the Russian enquiry pointed to the fact that the cable required was to be installed along an electrical railway track as signal and communication cable, but these technical specifications permitted, nevertheless, the use of the cable as carrier-frequency telecommunication cables. Such a use was not made impossible by the 16 pairs of charged conductors, as the functioning of the charged coil boxes could be interrupted at any time. It was, however, admitted that if it had been ordered as a component together with a complete railway signalling system as covered by Item 4481, the required cable could very likely have been supplied within the framework of A.P. 3. Although in the opinion of the German experts the cables in question were covered by Item 1526, there was no doubt that in the present case a "harmless end-use" of the material had been established. The fact that the enquiries were made either for a type of cable with 1.05 mm conductor-diameter, when Styroflex insulated, or with 1.20 mm conductor-diameter, when paper insulated, confirmed that only an operation at low frequencies was envisaged. A further proof that the cables were destined for steering and controlling an automatic signalling system was the low coefficient of reduction required, which could only be realised by the expensive aluminium cover, as well as the fact that the supply of charged coils was included in the proposed order.

7. The aims of the embargo controls on cables being to prevent the completion of an efficient air command system for offensive and defensive purposes, and not to prevent the modernisation of railway-lines, it could be stated that these aims were not prejudiced by an export of the required cable to the Soviet Bloc. It must be added that the cables required did not involve any technological know-how so far unknown to the Soviet Bloc. Cables of the same kind were manufactured - according to specifications - by the firm VEB Oberspree, the former cable works Oberspree of the AEG, in the Soviet-occupied Zone of Germany. Furthermore, factories producing the required cables were to be found in Soviet Russia, Hungary, Poland, and Czechoslovakia. To the contrary, the charged coils required were of a type which had been out of use in Western countries for about 10 years. Furthermore, according to the specifications received, only a limited number of communications per circuit - 12 to 15 for each pair of conductors - was required, while 6 conductor pairs for carrier-frequency-telephony were reserved for this purpose. As the German railways used cables of 66 conductor pairs and a much higher number of communications for long-distance-telephony, the cable in question was in this respect as well, lagging behind the technical standard of cables used in Western countries. It appeared that the specifications had been chosen so as to correspond to the Soviet national production, which would probably supply the main part of the cables required. Moreover, the cables in question did not contain any raw materials of which the Soviet Bloc had not a sufficient supply or which the Bloc could not procure from the Free World without difficulty.

8. The delivery of the proposed cables was to be made during the months of May to August, in other words, in the summer season. This circumstance pointed to the intention to instal the cables at the same time as the change-over of the railway to electrical operation. The short delivery period, moreover, confirmed the assumption that the main part of the cables for the Russian railway system was supplied by their own production within the Soviet Bloc, the orders placed in Western countries covering only final quantities which at the moment could not be procured from their own resources. If the West refused the export of such cables, the result, given the well-known energy of the Russians in pursuance of their plans, would very likely be a further expansion of the Soviet Bloc's cable production capacity. After satisfaction of the Russian requirements, such an additional production would be available for export from the Bloc to Free World countries, thus provoking serious consequences on Western cable markets, which already suffered from over-supply. The objection might perhaps be raised against the proposed export that the supply of the total quantities enquired for at Western countries would to a considerable extent set the Soviet factories free for the production of real communication cables. Although such an argument had never been taken into consideration so far when decisions were reached in the Coordinating Committee and there was no reason to treat the present case in a different way, it might be said, as to this point, that it was very doubtful whether all the enquiries filed with Member Countries would develop into firm orders, but that the Russian enquiries were motivated by the need to find a source of supply for some lacking final quantities.

9. The Delegate stated that the German authorities had endeavoured to submit to the Committee the objective facts as they were faced with them, in order to enable the Member Governments to reach a decision in full knowledge of the circumstances attached to this case. A careful consideration of all the factors involved had convinced the German authorities that there were more and better arguments in favour of the case than against it and that the making of an exception for the export of the required cables was justified. The German authorities hoped that the other Member Governments would come to the same conclusion. They attributed very great importance, however, to a similar treatment of the case by all the Member Governments involved. Any difference in the application of the embargo rules by individual Member countries would lead to a de facto discrimination against the manufacturers of those countries which interpreted the embargo controls more restrictively than others and thus result in bringing international cooperation in the field of strategic controls into serious disrepute. The German Delegation would follow the discussion on cables with great interest and reserved the right to make further comments in the course of the debate.

10. The ITALIAN Delegate stated that his Government had made a very careful study of the Belgium request. From the technical information contained in the initial memorandum, it would appear that some of the characteristics of the cables involved, particularly the quads intended for telephone communications, were similar to those of normal communication cables. On the other hand, it was obvious that other characteristics, such as for instance the presence of signalling conductors and the very low coefficient of reduction, were specifically required for railway signalling purposes and would be quite superfluous in the case of ordinary communications cable. The existence of the latter might show that the cables were indeed intended for installation along an electrified railway line for the working requirements of that line. The unusual coexistence of these factors explained the different interpretation given by several delegations to the scope of Items 1526 and 4481.

11. The Italian Government, who had received a similar request involving, according to the latest information, a quantity considerably higher than that indicated in COCOM Document No. 3451, believed that before the expression of a final opinion on the Belgian exception request a very thorough study of the question should be made in order to prevent any breaking of the principle of uniformity in the application of the controls through differing interpretations, which in the practical sphere would lead to a totally unacceptable discrimination against certain Member Countries. The Delegate fully endorsed the technical and economic comments made by the German Delegation and reserved the right to revert to these points at a later stage.

12. The UNITED STATES Delegate read his Delegation's memorandum (COCOM Document No. 3464) worded as follows:

"The United States Delegation believes that the communications cables as defined in the Belgian memorandum is embargoed by Item 1526.

"The definition of that item calls for the embargo of "communications cable of any type .... containing more than one pair of conductors and containing any conductor .... exceeding 0.9 mm in diameter." The Belgian cable meets the requirement for number of pairs and conductor diameter. The question remains as to whether it is communications cable. By definition communications refers to all types of transmittal of sounds, signals, images, writing, etc. The Belgian cable is evidently intended for such purposes.

"This cable is long distance cable which can be used for railroad communications and/or for any conventional communications purposes. The cable has substantially greater capacity than normal or necessary for the stated end-use. If this cable were to be used for railroad communications part of its capacity could and probably would be available for other uses. It is suitable for carrying telephone, teletype, facsimile, digital and possibly slowed down video signals. With these capabilities the cable could be used for air defense and other military purposes, for normal civil communications, or for a number of specialized communications purposes.

"If all the quads are unloaded it is possible to derive 168 2-way telephone channels or about 2,000 2-way 60 words per minute teletype channels or any combination of these at a ratio of about 12 teletype channels to 1 telephone channel. In addition 7 2-way phantom circuits could be derived for telecontrol purposes. This analysis assumes an ideal repeater spacing of about 35 miles is used and direct current is not used on teletype channels. This estimated maximum capacity would be reduced if repeaters are more than 35 miles apart, if quads are loaded, or if direct current were used for teletype channels."

13. Referring to the Belgian Delegate's statement recorded in paragraphs 2 to 4 above, the Delegate noted that there appeared to be some confusion between two distinct factors: the characteristics of the cables requested on the one hand and, on the other, the use that would be made thereof. What mattered were the characteristics of the cables, and there was no doubt that they met both the spirit and the letter of Item 1526 and were absolutely foreign

to Item 4481. Some Delegations, in referring to the possible end-use of the cables in question, had endeavoured to prove that they were not covered by Item 1526 and had sought to interpret the scope of that item in a certain manner. The United States Government, for their part, believed that the cables were without any shadow of doubt covered by Item 1526, and therefore raised objection to the Belgian request.

14. The UNITED KINGDOM Delegate stated that, in the view of his authorities, railway cable should be regarded as communications cable and consequently fell under Item 1526. The Delegate pointed out that several British firms had, since December last, received orders for this equipment and had been refused the necessary export licences since the United Kingdom authorities believed the cables to be embargoed under Item 1526.

15. The NETHERLANDS Delegate stated that, although the Netherlands industry had not applied for export licences, the Netherlands authorities had deemed it wise to consult various competent experts. These experts had been unanimous in stating that in their view, the cables ordered from Belgium were covered by Item 1526. Since they believed it essential to maintain uniformity in applying the controls so as to avoid any discrimination between Member Governments, the Netherlands Government felt that, if the Committee wished to authorise the export of these cables, it would be necessary to amend the definition of Item 1526 rather than to authorise a series of exceptions. In conclusion the Delegate stated that his Government were not greatly in favour of the Belgian request as at present submitted and would prefer to see the definition of the item in question amended.

16. The CANADIAN Delegate stated that, in view of the short time available to them, his Government were only able to give preliminary views on the Belgian case. Stressing that the Committee had but recently agreed that this type of equipment merited embargo, the Delegate stated that his Government regretted that such a large export of an embargoed item had already been contemplated. The Belgian Delegation justified their export proposal on the grounds that this type of cable presented none of the characteristics of communications cable in the normal sense, but should be regarded as an element of a railway system. Consequently the Canadian Delegation suggested that the exceptions request should be submitted under the terms of the "Accident of Definition" procedure, and that, should agreement be reached in the Committee on this case, the definition of Item 1526 should be amended or accompanied by an Interpretative Note authorising the export of cable of this type when it was to be used to equip railway lines. If the Committee did not agree to the use of the "Accident of Definition" procedure, the Belgian Government should submit their request under the terms of the 471 procedure as amended rather than on an ad hoc basis, and they should supply all the information required by this procedure in support of their case.

17. The DANISH Delegate stated that his Government's experts had made a careful study of this case and had concluded that the cables involved were in fact covered by Item 1526. Like his Netherlands and Canadian colleagues, he suggested that, if this export had to be authorised, the Committee should amend Item 1526 in order to safeguard uniformity in applying the control system.

18. The JAPANESE Delegate stated that his Government had made a benevolent study of the Belgian request and a careful review of the statement made during the previous meeting by the French Delegation (paragraphs 7 and 8 of COCOM Document No. 3452). The Japanese authorities were not, however, able to concur in the arguments adduced by the French Delegation, to the effect that the cable involved would fall under Item 4481 and not Item 1526. The Committee had just heard a statement by the German Delegate explaining that certain technical specifications of the order and the circumstances of the case did not correspond to the spirit of Item 1526. The Japanese Government nevertheless attached the greatest importance to the uniform application of the Embargo List, and whatever the technical or procedural arguments invoked, the essential thing was that Member Governments should act in accordance with the Coordinating Committee's unanimous decisions. Since the problem which

arose was to know whether the cables were covered by List I or List IV, there was a possibility that certain countries, believing them to be covered by Item 4481, might supply the equipment requested and notify this fact only later in their statistical returns. In these circumstances, the Japanese Government would raise no objection to the Belgian request, but reserved the right to interpret this item in the same way.

19. The BELGIAN Delegate stated that, after a survey undertaken both by experts of the Belgian Railways and by military experts, his Government had reached the conclusion that the cables involved were unquestionably covered by Item 4481.

20. The FRENCH Delegate wished, without repeating all the arguments already put forward, to state the reasons which had led his Delegation to believe and to continue to believe that the cables ordered were covered by Item 4481. He first pointed out that the French Delegation were unable to agree to the definition of the word "communications" as it appeared in the United States Memorandum, where it was explained that this term referred to all types of transmittal of sounds, signals, images, writing etc. If this was so, should telemetering and telecontrol systems be understood to fall within the communications sphere ? The Delegate pointed out in this connection that Item 1518 on the International Lists, which covered "Telemetering and Telecontrol equipment" made no mention of communications. He noted moreover that, according to the United States Delegation, the cables involved had a much higher capacity than was normal or necessary for the use contemplated. This was not the opinion of the French authorities, who judged on Western practice. Cables having 15 quads and 5 conductors were regarded as low-capacity cables. The S.N.C.F., for their part, used double-capacity cable on certain lines, and solely for the operation of the railway. The United States Delegation moreover believed that these cables were suitable for carrying telephone, teletype and facsimile etc. signals. This was true, but would be equally true of a simple two-wire overhead line, provided that it were accompanied by the special transmission equipment necessary, which was covered by Item 1523 and which was not mentioned in the order. As to the possibility of unloading the quads, the Delegate explained that such attempts had been made in France some 15 years ago and had resulted in total failure. Turning finally to the 56 km spacing between the repeaters mentioned by the United States Delegation, he explained that, from experience obtained in France, a 15 km spacing was a maximum for carrier-frequency systems. In conclusion the Delegate stated that the diverging opinions to which this question had given rise might be due to the fact that the United States Government had consulted only communications experts, whereas railway signalling experts would certainly, like the Belgian and French experts, be led to conclude that the cables in question presented the normal characteristics required for a railway.

21. The BELGIAN Delegate began by stating that if the Committee were thinking of amending Item 1526, their study should be effected not only from the communications point of view but also from the point of view of railway signalling. Moreover, with respect to the cables involved in the present instance, the Delegate confirmed the various remarks made by his French colleague (paragraph 20 above) and stressed once again that the coefficient of reduction of these cables, which necessitated a much more costly construction than that of communications cables, proved beyond doubt that the Russians intended to use the equipment ordered for an electrified railway line. The Delegate furthermore pointed out that the number of circuits for these cables was certainly not higher than the number of circuits for Belgian or French railway cables, which easily contained more than double the quantity. Finally, in view of the fact that it was impossible to instal overhead lines along a railway, he stated once again in conclusion that the cables ordered by Russia were an integral part of a railway signalling system, and were consequently covered by Item 4481.

22. The UNITED STATES Delegate, in reply to the French Delegate's comment that the term "telecommunications" did not comprehend telemetering and

telecontrol, cited the definition of the French Academy for this term: "Communication télegraphique ou téléphonique de toute nature (sons, signaux, images, écrits, etc.) effectuée par un procédé de transmission éléctrique". He welcomed the fact that the French Delegation agreed with the view of the United States experts that the cables involved were suitable for carrying telephone, teletype, facsimile, etc. signals; the only condition for such use being, in the view of the French Delegation, the presence of equipment not mentioned in the Russian order. The United States Delegation felt that this was a different question and that the important fact was that the cables involved were covered by Item 1526.

23. The GERMAN Delegate stressed that his Delegation believed that the railway cables involved fell under the terms of the item covering communications cables. There was on the other hand no doubt that they could form part of railway signalling apparatus, but did not alone constitute such apparatus under the terms of Item 4481. In this connection, nevertheless, there were two basically different opinions in the Committee and, since serious confusion might arise from such a situation, the German Delegation felt that an attempt should rapidly be made in order to restore the uniformity that was vital.

24. The BELGIAN Delegate stated that, in the belief that the cables ordered by the Russians fell under Item 4481, his Delegation were withdrawing the exception request submitted in COCOM Document No. 3436. The Belgian authorities would in due course decide whether or not they wished to authorise this export.

25. The UNITED STATES Delegate stated that the comments he had been instructed to make obviously took no account of the Belgian Delegate's latest statement. The United States Delegation noted that only two delegations opposed the view that the cables were covered by Item 1526. Since their particular concern was to maintain in the Committee that uniformity and equality which had so often been stressed, the United States Government felt that it was absolutely imperative that no participating country authorise the export of such cables until the Committee had reached agreement on the scope of the List I item concerned, or on exception requests justified by special circumstances or under the terms of the exceptions procedures in force. It was also imperative that any Government having already given such authorisation should do their utmost to prevent shipment. The United States Delegation were aware of the difficulty of cancelling a licence once it had been issued, but having themselves already had to take such action the United States Government hoped that, in view of the very serious situation obtaining, the interested Government would take the necessary steps, and thus contribute to the reaching of a uniform solution of the problem facing the Committee. Turning then to the Belgian Delegate's statement, the Delegate pointed out that, since the majority of Delegations recognised the applicability of Item 1526, any decision based on a bilateral interpretation of an International List item would face the Committee with a very serious situation indeed.

26. The FRENCH Delegate, in reply to his United States colleague, stated that in authorising the manufacture of cables, his Government had been guided by the unanimous opinion expressed by the most highly qualified experts in communications and railway spheres. The Delegate undertook to transmit to his authorities the remarks made by the United States Delegate. He nevertheless wished to point out that, under French law, it did not appear to be possible to withdraw a licence once it had been granted, and added that the firm concerned had already not only bought the necessary stocks but had also begun to produce the equipment ordered. Such an action might put the State in the position of having to pay a large indemnity to this firm.

27. As to the question of the uniform application of the control system, the Delegate recalled that his Delegation had frequently advocated this basic principle and stressed that the present case emphasized the necessity of drafting more specific definitions for Item 1526 and 4481.

If it were true that only two Delegations believed the cables concerned to be covered by Item 4481, it should also be recognised that all Member Governments except two considered that the export might be authorised on an exceptional basis or under the terms of the "Accident of Definition" procedure. It was therefore highly desirable that the Committee reach unanimous agreement in this connection in order to restore the uniformity desired by all.

28. The CHAIRMAN noted that, before the withdrawal of the Belgian case, a clear indication had been given by the various delegations of the necessity to undertake a review, or at least a study, of Items 1526 and 4481. It would therefore be necessary between now and the 6th April for the interested Delegations to submit redefinition proposals for study during the discussions scheduled to start at that time. As to the question of the uniform application of the control system, moreover, the Chairman suggested that a distinction should be made between past and future practice. He recommended that the interested delegations invite their Governments not to authorise exports of such cables before the discussions of the 6th April should have taken place. He further asked the French Delegate if he would be able, during the next day's meeting, to say whether or not his Government would be in a position to reconsider the decision already taken.

29. The FRENCH Delegate stated that, in the view of the unexpectedly divergent views to which this question had given rise, his Delegation undertook not to issue any new licence in the future for the equipment concerned until the Committee had reached a decision. As to the past, the Delegate undertook to transmit the views expressed to his authorities, without in any way prejudicing his Government's decision, which at the present time was a final one.

30. An exchange of views then took place during which the German and Italian Delegates emphasized the extreme urgency of reaching a uniform decision on the problem and the COMMITTEE agreed to resume discussion on the 19th March.